



# Human Performance Center

## Course Description

# Human Performance Fundamentals

### Objective

Introduce participants to concepts, principles, and practices to improve human performance. The course introduces a new view and tools for reducing facility accidents and events caused by human error. Participants will gain an appreciation of how events come about, and what organizations and workers can do to eliminate events through the reduction of human error and management of defenses/controls to minimize their consequences.

### Description

The program is planned in 4 modules over a one-day period. The training will include group discussions and exercises.

The optimal class size is 20 (30 max.)

### Target Audience

The course can accommodate a broad spectrum of participants from various organizational levels and technical specialties. Participants may have varying degrees of experience within DOE and contractor organizations. Training can be tailored somewhat for specific organizational needs.

#### Module 1

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### Introduction/Strategic Approach (1.5 Hours)

- Introduction of Instructors and Participants
- Course Objectives/Overview/Expectations
- Why the Emphasis on Human Performance
- Performance is Behavior Plus Results (  $P = B + R$  )
- Anatomy of an Event
- Reducing Error and Managing Defenses (  $Re + Md = \emptyset E$  )
- Principles of Human Performance

#### Module 2

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### Reducing Error (1.5 Hours)

- Common Traps of Human Nature
- Unsafe Attitudes
- Slips, Lapses, Mistakes, Errors, and Violations
- Active and Latent Errors vs. Violations
- Team Errors

- Mental Functioning and Information Processing
- Memory and Attention
- Performance Modes and Error Types
- Error-Likely Situations and Error Precursors
- Error Prevention Principles and Tools

#### Module 3

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### Managing Defenses (1.5 Hours)

- Defenses, and the Organizations Role in Defenses
- Defense Functions
- Reliability of Defenses
- Defense in Depth
- Types of Defenses (engineered, administrative, cultural, and oversight)
- Managing Defenses
- The Performance Model
- Finding and Correcting latent Organizational Weaknesses

#### Module 4

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### Leadership & Culture (1.5 Hours)

- Leadership and the Leader's Role
- Key Leadership Practices
- Facilitate Open Communication
- Promote Teamwork
- Reinforce Expectations
- Eliminate Latent Organizational Weaknesses
- Value the Prevention of Error
- Safety Culture
- Principles of Shared Assumptions, Values Beliefs, Behaviors and Norms
- Summary